

# PEM® Type SFN™ Spinning Flare Nut



PEM® Type SFN™ spinning flare nut is a one piece, flanged hex nut that installs by pressing it into a properly sized, pre-punched embossed mounting hole. The nut is permanently captive and still spins freely in the sheet. This allows quick attachment to mating hardware, eliminating much of the need for loose fasteners.

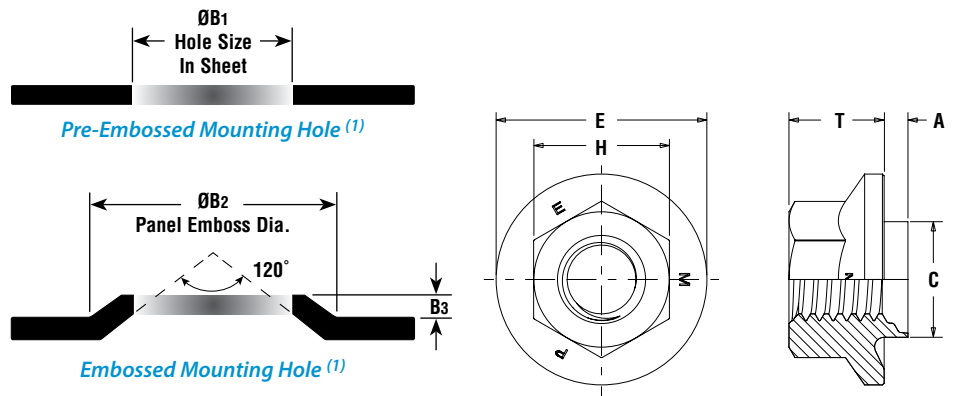
Above the sheet, the part appears identical to standard flanged hex nuts, while on the other side, the part remains flush.

The spinning flare nut eliminates loose hardware such as flange nuts. When used with a self-clinching stud or other externally threaded fixed hardware, all loose hardware is eliminated from the applications.



## Features and Benefits

- Rotates freely in sheet
- Assembly time and cost reduction
- Reduction in loose hardware
- Installs into any sheet hardness



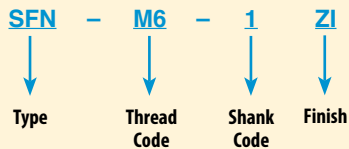
All dimensions are in millimeters.

METRIC	Thread Size x Pitch	Type	Thread Code	Shank Code	A (Shank) Max.	Sheet Thickness ±0.1	ØB1 Hole Size In Sheet +0.08	ØB2 Panel Emboss Dia. Nom.	B3 Panel Emboss Height Nom.	C Max.	E ±0.3	H -0.2	T ±0.25
		Fastener Material											
		Steel											
M5 x 0.8	SFN	M5	1	1.3	1	7.5	10	0.4	7.25	12.8	7.98	6	
			2	1.8	1.5								
M6 x 1	SFN	M6	00	1.3	1	8.75	12.25	0.7	8.5	15.5	9.98	7	
			1	1.8	1.5								
M8 x 1.25	SFN	M8	00	1.3	1	10.5	14.9	1	10.25	20	12.98	9	
			1	1.8	1.5								

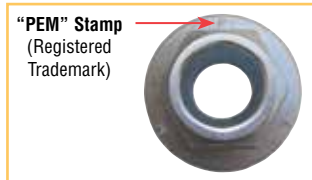
(1) Variations in mounting hole size and sheet material hardness may affect results of the hole preparation procedure shown here. For technical assistance, send an e-mail to [techsupport@pemnet.com](mailto:techsupport@pemnet.com).

Threads: Internal, ASME B1.1, 2B / ASME B1.13M, 6H  
 Material: Carbon steel  
 Finish: ZI - Zinc plated, 5µm, colorless (2)  
 For use in: Any sheet hardness

## Part Number Designation



(2) See PEM Technical Support section of our web site ([www.pemnet.com](http://www.pemnet.com)) for related plating standards and specifications.



# PEM<sup>®</sup> Type SFN<sup>™</sup> Spinning Flare Nut

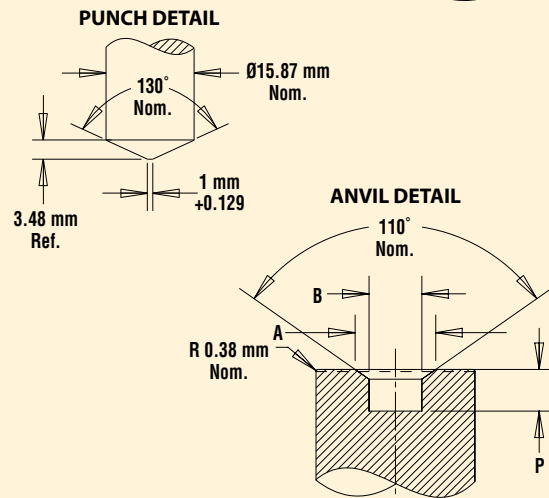
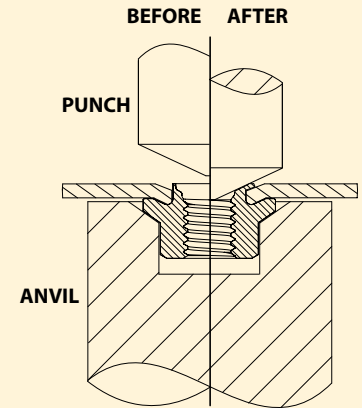
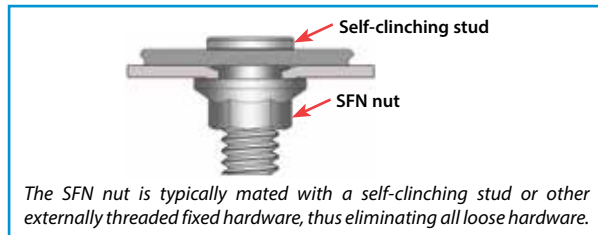
## INSTALLATION

1. Prepare properly sized embossed mounting hole in sheet. Do not perform any secondary operations such as deburring.
2. Insert fastener into the recessed anvil and place the mounting hole (preferably the punch side) over the shank of the fastener.
3. With installation punch and anvil surfaces parallel, apply squeezing force to flare the shank of the fastener.

## PEMSERTER<sup>®</sup> Installation Tooling

Type	Thread Code	Anvil Dimensions (mm)			Anvil Part Number	Flaring Punch Part Number
		A ±0.127	B ±0.025	P Min.		
SFN	M5	14.5	9.5	7.49	8018538	8018670
SFN	M6	19	11.81	8.51	8018539	8018670
SFN	M8	22.61	15.29	10.49	8018540	8018670

If your application requires installation into a flat sheet, please contact our technical support at [techsupport@pemnet.com](mailto:techsupport@pemnet.com) as we have tooling options available.



## PERFORMANCE DATA<sup>(1)</sup>

METRIC	Type	Thread Code	Shank Code	Test Sheet Material					
				Stainless Steel		Cold-rolled Steel		Aluminum	
				Installation (kN)	Pushout (N)	Installation (kN)	Pushout (N)	Installation (kN)	Pushout (N)
SFN	M5		1	7.2	862	7.2	642	5.8	428
			2	7.2	1261	7.2	1261	5.8	1261
SFN	M6		00	12.9	964	12.9	642	12.9	428
			1	12.9	1431	12.9	1431	12.9	1329
SFN	M8		00	12.9	964	12.9	642	12.9	642
			1	12.9	1431	12.9	1431	12.9	1329

(1) Published installation forces are for general reference. Actual set-up and confirmation of complete installation should be made by observing proper seating of fastener as described in the installation steps. Other performance values reported are averages when all proper installation parameters and procedures are followed. Variations in mounting hole size, sheet material, and installation procedure may affect performance. Performance testing this product in your application is recommended. We will be happy to provide technical assistance and/or samples for this purpose.

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Technical support e-mail: [techsupport@pemnet.com](mailto:techsupport@pemnet.com)